



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,249	07/23/2003	David Kingsolver	1327-001	9300

47888 7590 04/04/2007  
HEDMAN & COSTIGAN P.C.  
1185 AVENUE OF THE AMERICAS  
NEW YORK, NY 10036

EXAMINER
----------

GELIN, JEAN ALLAND

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/625,249

Applicant(s)

KINGSOLVER ET AL.

Examiner

Jean A. Gelin

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This is in response to the Applicant's arguments and amendments filed on December 28, 2006 in which claims 1 and 11 have been amended. Claims 1-18 are currently pending.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 recites the limitation "said target base station" in line 20. There is insufficient antecedent basis for this limitation in the claim.

4. Claims 1 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains the following language: the claim recites "at least one target station" in line 22, and "at least one target station" in line 25. It is unclear whether the Applicant refers to the same "at least one target station" or different "at least one target station". It is also unclear what the applicant calls "at least one target station" is it the "two-way radio" or the "at least one target base station". Appropriate correction is required.

Claim 1, lines 17-26 appears to include repetitions of phrases, which render the claim vague and indefinite. Appropriate correction is required.

Claim 11 contains the following language: the claim recites "at least one target station" in lines 9-10, "at least one target station" in line 13, and "at least one said target station". It is unclear whether the Applicant refers to the same "at least one target station" or different "at least one target station". It is also unclear whether the "at least one said target station" is referred to the first or second "at least one target station". Appropriate correction is required.

The rest of the claims shall be reviewed for consistency of language as well.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-3, 5, 7-13, and 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheinert et al. (US Patent Application Publication 2004/0204097 A1) in view of VOCAL Technologies Ltd. – "VOCAL" (Non-Patent Literature document number "V.34 Modem-0004A"; cited in form PTO-892).

Scheinert et al. discloses a system (Figure 5) for two-way radio communication comprising:

- (a) a first two-way radio (for example, lower 24 in Figure 5) comprising:
  - (i) a means for selecting and transmitting a signal code (wireless signal) to a base/repeater station (mobile station 24 inherently possess the claimed means because

Art Unit: 2617

it can at least communicate via CDMA [page 4, paragraph 0038, line 6] and/or IP [page 2, paragraph 0024, line 6] and/or standard air interface [page 3, paragraph 0029, line 2]); and

(ii) a means for sending communication signals to a base/repeater station (mobile station 24 inherently possess a transmitter – paragraphs 0005, 0029, 0031);

(iii) a means for receiving communication signals from a base/repeater station (mobile station 24 inherently possess a receiver – paragraphs 0005, 0029, 0031);

(b) a base/repeater station (IBS 42 either alone or in combination with computer 44 and/or modem 46 – Figures 4-5) comprising:

(i) a base/repeater station decoder (for example, modem 46 – see explanation hereinbelow) for decoding the signal code (wireless signal) from said first two-way radio (24) into a signal that can be recognized by a base/repeater station controller (IBSC 48 – Figure 5) and transferring said signal to said base/repeater station controller (in particular paragraph 0027; in general paragraphs 0025-0031); and

(ii) wherein said base/repeater station controller comprises a means for receiving (inherently possess a receiver) said decoded signal from said base/repeater station decoder and correlating said decoded signal to one or more internet addresses (step 68 – Figure 6; claim 15 of Scheinert et al.) associated with at least one target station (another IBS or a BTS 22) and a means for establishing a bi-directional computer network link (via 49 or 46 – Figure 4; paragraph 0027) with said at least one target station using said internet address for the exchange of communication signals (in particular paragraph 0027; in general paragraphs 0025-0031);

Art Unit: 2617

(iii) wherein said base/repeater station further comprises a means for sending and receiving communications signals (IBS inherently possess a transmitter and receiver) to and from said first two-way radio (paragraphs 0029, 0031);

(c) at least one target station (another IBS or a BTS 22) comprising:

(i) a target station controller (for example IBSC or BSC – Figure 5) comprising a means for establishing a bidirectional computer network link with said base/repeater station for communication signals (for example, via 49 or 46 – Figure 4; paragraph 0027);

(ii) wherein said target station further comprises a means for sending and receiving communication signals (IBS or BTS inherently possess a transmitter and receiver) to and from a second two-way radio (paragraphs 0005, 0029, 0031); and

(d) at least one second two-way radio (another mobile station 24 or upper 24 in Figure 5; paragraphs 0005, 0029, 0031) comprising:

(i) a means for receiving communication signals from a target station (mobile station 24 inherently possess a receiver – paragraphs 0005, 0029, 0031); and

(ii) a means for sending communication signals to a target station (mobile station 24 inherently possess a transmitter – paragraphs 0005, 0029, 0031);

(e) whereby communication signals can be bi-directionally exchanged between said first two-way radio and said second two-way radio via said bi-directional computer network link between said base/repeater station and said target station (Figures 4-5; paragraphs 0025-0031) (the language used by Applicant merely suggests or makes optional those features described as "can be" or "whereby"; such language does not

Art Unit: 2617

require steps to be performed nor limits the claim to a particular structure – MPEP 2111.04).

Scheinert fails to disclose a decoder and controller located at the base/repeater station. However, the preceding limitation is known in the art of communications. Scheinert discloses the claimed invention except for arranging the computer, the modem, and the IBS in a single housing having the function of a base/repeater station. It could have been obvious to one having ordinary skill in the art at the time the invention was made to contain the computer, the modem, and the IBS in a single house, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Furthermore, Scheinert et al. does not explicitly show a decoder. Scheinert et al. does teach modem 46 can be a V.34 modem (paragraph 0085, claim 24 of Scheinert et al.).

Nevertheless, it is well known in the art that V.34 modems include and use codec (coder-decoder), and VOCAL is evidence of the fact (see lines 7, 14, 28, 40 of VOCAL). Consequently, Scheinert et al. suggests decoder as claimed by teaching V.34 modem.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a decoder in Scheinert et al.'s invention because it is suggested by himself; also for the advantage of globalization / standardization of analog and digital world.

Regarding **claim 2**, Scheinert et al. and VOCAL disclose everything claimed as applied above (see *claim 1*). In addition, Scheinert et al.'s mobile station 24 inherently

Art Unit: 2617

possess a keypad to place calls (paragraphs 0005, 0035, 0068, 0072, etc.).

Consequently, said means for selecting a signal code to said base/repeater station is a keypad device.

Regarding **claim 3**, Scheinert et al. and VOCAL disclose everything claimed as applied above (see *claim 1*). In addition, Scheinert et al. discloses wherein said means for selecting a signal code to said base/repeater station is a channel selector device (paragraphs 0029, claim 14 of Scheinert et al.).

Regarding **claim 5**, Scheinert et al. and VOCAL disclose everything claimed as applied above (see *claim 1*). In addition, Scheinert et al. discloses wherein said signaling method comprises a modulated RF carrier (for example, CDMA [page 4, paragraph 0038, line 6] and/or standard air interface [page 3, paragraph 0029, line 2]).

Regarding **claims 7-8**, Scheinert et al. and VOCAL disclose everything claimed as applied above (see *claim 1*). In addition, Scheinert et al. discloses wherein said base/repeater station means for correlating the signal to one or more internet addresses associated with a target station is a computer based radio controller that contains a relational data base; and wherein the Internet address is an IP address (step 68 – Figure 6; claim 15 of Scheinert et al.) (in particular paragraph 0027; in general paragraphs 0025-0031).

Regarding **claim 9**, Scheinert et al. and VOCAL disclose everything claimed as applied above (see *claim 1*). In addition, Scheinert et al. discloses wherein said means for establishing a bi-directional computer network link with one or more target base/repeater stations is a voice communication system selected from a group



Art Unit: 2617

consisting of conventional, trunked radio systems or combinations thereof (PSTN; service providers Sprint, Verizon, Cingular, etc.; GSM, 3G – paragraphs 0002-0005, 0037-0038, 0059; Figure 5).

Regarding **claim 10**, Scheinert et al. and VOCAL disclose everything claimed as applied above (see *claim 1*). In addition, Scheinert et al. discloses wherein said target station further comprises a target station decoder for decoding a signal code from said second two-way radio into a signal that can be recognized by a base/repeater station controller and for transferring said signal to said base/repeater station controller; and wherein said target station controller further comprises a means for receiving a decoded signal from said target station decoder and correlating said decoded signal into one or more internet addresses associated with one or more base/repeater stations and a means for establishing a bi-directional computer network link with said at least one base/repeater station for the exchange of communication signals using said internet address; and wherein said at least one second two-way radio is further comprised of a means for selecting and transmitting a signal code to a target station (because the target station can be another IBS or a BTS 22; same explanation above for *claim 1* is applied).

**Claims 11-13 and 16-18** are corresponding method claims of apparatus *claims 1-3 and 7-9*; therefore, they are rejected for the same reasons explained above.

7. **Claims 4, 6, and 14-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheinert et al. and VOCAL as applied to *claims 1 and 11* above,

Art Unit: 2617

and further in view of the Admitted Prior Art (disclosed on page 2, second full paragraph and page 6, second full paragraph of the present specification).

Regarding **claims 4, 6, and 14-15**, Scheinert et al. and VOCAL disclose everything claimed as applied above (see *claims 1 and 11*). However, the combination fails to specifically disclose DCS, CTCSS, DTMF, or any combination thereof, nor LTR, MPT-1327, EDACS, or any combination thereof as claimed.

However, these conventional methods/protocols are particular requirements of particular systems as shown by the prior art admitted by applicant on page 2, second full paragraph and page 6, second full paragraph of the present specification ("Admitted Prior Art"). Use of any of these conventional methods/protocols is obvious expedient as an engineering design choice.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use DCS, CTCSS, or DTMF, and/or LTR, MPT-1327, or EDACS, as claimed for the selection of any of these conventional methods/protocols is an engineering design choice as particular requirements of particular systems.

### ***Response to Arguments***

8. Applicant's arguments filed 07/31/06 have been fully considered but they are not persuasive.

As per claims 1 and 11, the Applicant argues in substance that Scheinert's cell phone does not constitute "two-way radio". The Examiner disagrees with the preceding arguments. A two-way radio is a radio that can both transmit and receive. And example

Art Unit: 2617

of two-way radio that both transmits and receives is a mobile phone or cellular phone to carry the two directions of a conversation. Therefore, the rejection is maintained.

The Applicant further argues that Scheinert fails to disclose a decoder and controller located at the base/repeater station. However, the preceding limitation is known in the art of communications. Scheinert discloses the claimed invention except for arranging the computer, the modem, and the IBS in a single housing having the function of a base/repeater station. It could have been obvious to one having ordinary skill in the art at the time the invention was made to contain the computer, the modem, and the IBS in a single house, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

The Applicant further argues that the signal transfer occurs through conventional link not an IP connection. However, the Examiner disagrees with the preceding arguments. Scheinert discloses a conventional wireless network connected to an IP network to increase the wireless network capacity. Thus Scheinert's system has the capability to transfer signal through conventional link.

The Applicant further argues that Scheinert fails to disclose the purpose of correlating the decoded signal to one or more internet addresses ... to establish bi-directional computer network link with a target station using the internet address for the exchange of two-way radio communication signals. In view of the 112 rejection recited above, the Examiner maintains the rejection because the limitations in lines 17-26 is unclear (see rejection above).

Art Unit: 2617

The base/repeater station and the first two-way radio contain the same elements with the target base station and the second two-way radio. They are rejected for the same reasons recited above. Therefore, the rejection is maintained and the office action is final.

The Applicant further argues that claims which depend from claims 1 and 11 should be allowed because claims 1 and 11 are allowable over the cited references. However, the rejections of claims 1 and 11 are maintained. Therefore, the rejection of claims 2-10 and 12-18 are maintained and the office action is final.

#### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGelin  
March 28, 2007

**JEAN GELIN**  
**PRIMARY EXAMINER**

A handwritten signature in cursive script that reads "Jean Gelin".